305(b) Consistency Workgroup Meeting

Report Outs from Breakout Group Sessions

Establishing a "Maybe List"

Theresa Hodges, KS Department of Health & Environment, presented for the "Maybe List" breakout group. The group organized their presentation into six basic questions and associated options/recommendations.

(1) *Under what conditions can waters be placed in this category?*

The breakout group suggested that waters meeting any of the following criteria could be placed by States in this category:

- Insufficient data to determine attainment status;
- State has low confidence in the data used to list water (possibly, because it was collected by a third party, does not have sufficient QA/QC documentation);
- Conflict in data types;
- Marginal/borderline data (i.e., the water is not clearly supporting/nonsupporting);
- State lacks a numeric translator for the narrative water quality criterion;
- Underlying water quality standard is in flux;
- Data were collected during extreme events which may/not be indicative of typical conditions; or
- Listing/attainment status decisions that are based on evaluated (vs. monitored) data.

(2) *Where do you place these waters?*

The breakout group strongly recommended placing these waters in a separate category under 305(b). Some members felt this category could be a part of the "fully supporting" waters under 305(b); several others disagreed. The workgroup did not think States should be required to list these waters under 303(d) but wanted to leave that decision to States' discretion.

(3) *What should this category be named?*

The breakout group did not come to any agreement on what the category of waters should be called. The following suggestions were made, however, with a consideration of how the category's name may shape the public's perception of what actions will be taken on behalf of the waters.

- Waters of Concern;
- Not Rated;
- Inconclusive;
- In Need of Verification; and
- Indeterminate.

(4) *Should the category of waters be published? If so, where?*

All breakout session participants agreed that this list should be published along with the 305(b) report. It should be left to States to decide whether to include these waters on the 303(d) list.

(5) *What followup actions are necessary for these waters?*

The group agreed that follow-up actions must be designed to address the factor(s) that initially triggered listing under this category in the first place. The following types of follow-up actions may be generally appropriate:

- Increase water quality monitoring (to deal with data quality/quantity issues, conflicting data, and waters listed based on data collected during/following extreme events);
- Verify water's compliance record and/or presence of other management plans;
- Review underlying water quality standard-possibly in context of triennial reviews (to address translator issues, standards in flux, and methods questions); and
- Develop a narrative criterion translator.

In addition, the group suggested tying in follow-up actions to existing basin management plans, monitoring strategies, or "active management lists" the State may already have. Finally, the group recommended that States be required to specify both the type and timing of their next action but not necessarily the final action related to the water in question.

(6) *What action should be taken by States that currently include these waters on their 303(d) lists but may not wish to do so in the future?*

The group recommended that EPA allow States to remove these waters from the 303(d) list if they meet any of the conditions or criteria listed under Question 1, above.

NOTE: This group also briefly discussed how this category of waters would impact State listing of threatened waters. Ultimately, the group believed that "breaking out" these waters would tighten and clarify the threatened waters list(s).

Data Quality/Statistical Tools

Al Hindrichs, LA Department of Environmental Quality, presented for the Data Quality/Statistical Tools breakout group. As background, Mr. Hindrichs reported that fundamentally, EPA "approves" State methods through it's approval of the 303(d) list and Section 106 grants. He then reported that the group identified the following priority need.

EPA should develop guidance on making water quality attainment decisions, especially for small, chemical data sets collected during routine ambient monitoring.

The workgroup recommended that the guidance:

- Build upon existing guidance (e.g., the data quality/data quantity hierarchy in the 305(b) guidelines);
- Be tailored to address specific parameters (e.g., metals, pathogens);
- Be based on how criteria were set and uses applied; [NOTE: Certain criteria (e.g., human health) may be more "important" and therefore warrant special attention or consideration.]
- Identify different/appropriate statistical methods for different sample sizes;
- Recommend that States consider their confidence in datasets/analyses when making attainment decisions [NOTE: "Important" criteria need stringent confidence requirements."]
- Consider the variability of the parameter used to determine attainment status and the representativeness (e.g., seasonality, age) of the data in monitoring design and analysis.

The breakout group also recommended that EPA do the following:

- Evaluate the merits and limitations of the various statistical options available;
- Evaluate whether data and/or analyses with different confidence levels can be used to support different decisions (e.g., supporting, not supporting, may support...);
- Clarify whether alternative approaches (other than the "10% rule") will be allowed; and
- Make development of the guidance and the analyses described, above, a high priority for the Agency

Monitoring Design

Jay Sauber, NC Department of Environment and Natural Resources, led the presentation summarizing the breakout group's discussion. Mr. Sauber opened his presentation with the following observations and comments made by the breakout group.

- More resources are needed.
- There are differences in the data quality needed for and purpose of 303(d) lists and 305(b) reports.

- Monitoring designs must be evaluated within the context of the primary goal of the effort. For example, States generally have very specific, targeted data and reporting needs (related only to the State); EPA often takes a more holistic or 'big-picture' approach, using the data to report on waters of the nation or to develop Reports to Congress.
- States tend to favor targeted monitoring programs; EPA's water quality monitoring program data needs are best served by probabilistic monitoring programs.
- EPA should not divert new Section 106 (and other) funds to develop TMDLs.
- Probabilistic monitoring data are difficult to use to support site-specific listings under 303(d) or 305(b).
- Many good data sources exist. Important sources of data include:
    - volunteer monitoring information;
    - State data;
    - EPA's Environmental Monitoring and Assessment Program (EMAP);
    - NPDES discharge permit reports;
    - U.S. Geological Survey;
    - Fish and Wildlife agencies (State and federal);
    - Nongovernmental organizations, including conservation groups, volunteer groups;
    - Universities;
    - Natural Resources Conservation Service;
    - U.S. Forest Service; and
    - National Oceanic and Atmospheric Administration.

- While good data exist, environmental agencies (at the State level and at EPA) lack the staff to pull together the information at the State or national level.

Mr. Sauber then noted that, historically, 303(d) lists and 305(b) reports were based, to varying degrees, on speculative information (especially related to identifying causes and sources). The onset of TMDL program lawsuits, however, has increased the degree of scientific rigor needed to justify a 303(d) listing. States have a higher confidence in their data and in the statistical tools they use to interpret the data.

Next, Mr. Sauber stressed that it is important that *303(d) and 305(b) are not inconsistent.* This is critical even though 303(d) and 305(b) "ask" different questions (level of impairment vs. impact as compared to a reference stream) and require different levels of "defensibility."

The group focused much of its discussion on the following questions:

For 305(b): Do you have a comprehensive assessment of your waters?

The breakout group determined that "comprehensive assessment" does not necessarily mean that each and every segment of water has been assessed but rather that a State has a comprehensive understanding for the different waterbody types (e.g., lakes, rivers,

estuaries). To answer the question, the breakout group suggested, a State should be able to do the following:

- Describe what it means by "comprehensive";
- Explain how it 'covered' the State (e.g., percent of waters monitored, evaluated, assessed);
- Describe its monitoring program (what constitutes a good assessment vs. an excellent assessment). Good monitoring programs may include the following elements:
    - multi-matrix assessments (biological, chemical, etc.);
    - adequate spatial and temporal coverage;
    - targeted monitoring;
    - rotational basins; and
    - seasonal coverage.

    These elements should be described for all relevant waterbody types, including rivers, lakes, streams, estuaries, and beaches (although the breakout group was unsure how to do this for wetlands).

    Excellent monitoring programs may include the following <u>additional</u> elements:

    - probability-based monitoring to cover all waters;
    - long-term, statewide coverage;
    - coverage of all waterbody types; and
    - information on maintaining and continuously improving the collection of data and information.

For the 303(d) list: Can you tell where impaired waters are and why they are impaired?

The breakout group suggested that, to answer this question, a State should be able to provide the following information:

- timeframe;
- confidence levels (e.g., 90%);
- extent of impaired reach (extrapolation up and downstream); and
- an explanation of how the State made the use support decision.

hrid-Party Data

This breakout group focused on the use of third party data to inform or support 303(d) and 305(b) decisions. Jack Smith, WY Department of Environmental Quality, presented for the breakout group. Mr. Smith reported that the breakout discussed the following key questions:

How does a State use its third party data?

Who solicits these data?

Which third party datasets are good enough to use to support 303(d) listing?

The breakout group developed the following recommendations related to third party data use by the States.

- States should invite all third party data..
- States should identify in writing how they plan to use the data (and for what purpose).
- States should require different QA levels for the different data uses. For example, data used to support 303(d) listing decisions should pass stricter QA/QC tests than those used to support the development of a State's 305(b) report.
- States should clearly state their QA/QC requirements for data.
- States should lay out their formatting preferences (e.g., electronic) for data delivery.
- States should clearly state their preferred level(s) of analysis (i.e., should the third party submit raw data or data that have been analyzed in some manner).
- States should advise the public and other interests well in advance of when the data are requested.
- States should communicate their plans for using third party data through established state channels, such as:
  - watershed councils;
  - land management agency partners;
  - special interest ties; and
  - public notice.
- States should follow through on their written policies.

Summary of Breakout Discussion Session

Following these presentations, the moderator (Martha Prothro) opened a general discussion by asking participants to reflect on how their managers would respond to these recommendations/possible new directions presented by the four breakout groups. Several participants responded that their managers would be pleased (1) that these issues had been discussed, (2) that many of the recommendations called for flexibility, and (3) that EPA was planning to offer a variety approaches (good to best). At least one participant suggested that State program managers would be more comfortable if EPA call this document a "technical resource" rather than "guidance."

One participant raised the issue of whether public citizens (and, especially, special interest groups) might be concerned that the "maybe" or "indeterminate" category would turn into a "dumping ground." Several meeting participants commented that they already

set aside certain waters and have found public involvement in and understanding of the listing process helps allay others' fears. Others noted that it is important also to be clear about what followup activities are planned for the "indeterminate" list waters. One participant emphasized the importance of convincing constituents that, with this category, the state is able to focus attention on a broader universe of waters than it otherwise would. At least one state representative noted that environmental groups in his state already do not trust his agency and would rather see the waters on the 303(d) list.

One meeting participant voiced a concern about the emphasis of statistical tools, and wondered how his State would fit the biological and habitat information it collects into the statistical approaches discussed by the Data Quality/Statistical Tools breakout group. This person commented that "raising the bar" for statistical certainty would make it difficult, in his state, to show impairment. Another participant suggested that EPA (or some party) prepare and maintain a resource guide of experts on multi-metric indices, statistical tools, and other topics.

Several participants noted that volunteers often collect high quality data, and observed that these data, if they have undergone a QA review, are often appropriate to include in 305(b) reports. At least one participant suggested that States build "front-end" systems to accept third party data.